



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/696,600

10/29/2003

Jeffrey F. Hatafsky

5957-63700

6849

35690

7590

02/17/2011

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.

P.O. BOX 398

AUSTIN, TX 78767-0398

EXAMINER

SHIBRU, HELEN

ART UNIT

PAPER NUMBER

2484

NOTIFICATION DATE

DELIVERY MODE

02/17/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent_docketing@intprop.com

ptomhkg@gmail.com

Office Action Summary	Application No. 10/696,600	Applicant(s) HATALSKY ET AL.	
	Examiner HELEN SHIBRU	Art Unit 2484	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, and 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments, filed 12/02/2010, have been entered and made of record. Claims 1-6, 8-13, 15-22 are pending, claims 21-41 are cancelled. In view of Applicants amendment to the drawings, the objection to the drawings is hereby withdrawn.

Amendments must be filed in compliance with the requirements of 37 CFR 1.121 (e.g., the amendment must include a complete claim listing whenever a claim is added, **canceled**, or amended). See MPEP § 714. The cancelled claims 23-41 are not included in the claim listing filed on 12/02/2010.

Response to Arguments

2. Applicant's arguments filed 12/02/2010 have been fully considered but they are not persuasive. See the reasons sets forth below.

Regarding Applicant's amendment to claims 15-20 to overcome the rejection under 35 U.S.C § 101, the rejection under 35 U.S.C § 101 is hereby withdrawn. However the claimed 'computer-readable storage device' is not found in the specification. See the objection to the specification further below.

In regard to claim 1

Applicant states, "Guedalia does not disclose 'a processing element ... configured to monitor traffic between the storage medium and the processing element,' and 'the processing element is configured to dynamically determine, based at least in part on the monitored traffic, an extent of a first frame in the first progressively-

Art Unit: 2484

encoded video stream.’ Applicant also states, “the term ‘traffic’ does not appear in this [Guedalai] reference.’

In response the Examiner agrees that the term ‘traffic’ by itself does not appear on the applied prior art. However the function which the term stands for is in the prior art. In response to Applicant’s argument that Guedalia does not disclose ‘a processing element ... configured to monitor traffic between the storage medium and the processing element,’ and ‘the processing element is configured to dynamically determine, based at least in part on the monitored traffic, an extent of a first frame in the first progressively-encoded video stream, the Examiner respectfully disagrees.

Guedalia discloses the user does not have to wait for all the data to arrive in order to interact with the object, nor does the client computer have to do the intense processing to render the VRML database into bitmaps (see col. 26 lines 41-45). According to this statement, note, all the data do not arrive at the same time.

The invention operates by receiving the viewing parameters from the user, rendering the corresponding image on the server into a raster bitmap image, encoding the bitmap into progressive partial frames and inserting them into a two-dimensional server data base (see col. 26 lines 19-24).

The encoded data within the server database is continually streamed from server to client, enabling the client to begin viewing a low quality image as soon as the first partial frame data arrives (see col. 26 lines 23-26). According to this statement, the prior art teaches, the client begin viewing a low quality image, i.e. only one partial frame data

Art Unit: 2484

is viewed by the client at first, the client didn't wait till all the data to arrive in order to interact with the object.

The streaming simply continues in the background, and the quality of the image on the client side is enhanced as additional partial frames integrated (see col. 26 lines 33-35).

Therefore the prior art teaches monitoring traffic because it clearly teaches all the partial frames do not arrive at once, but gradually or one at a time and the user does not have to wait till all the data to arrive at once. Streaming traffic is controlled or monitored and the image quality is enhanced gradually.

Further see also col. 20 lines 43-46 where the prior art teaches the client CPU can decompress 30 compressed frames into full frames every second. The player does not slow down when bandwidth is slow. Hence even if user selects low bandwidth the prior art teaches decompressing frames in every second.

In regard to claim 8

Applicant states, "Guedalia does not disclose 'in response to detecting a pause in displaying the first frame, receiving an additional portion of the frame data for the first frame,' as recited in claim 8. ... The term 'pause' nowhere appears in this reference."

In response the Examiner only agrees that the term 'pause' is not in the reference but disagrees with the applicant statement that the pause as disclosed in the present application is not taught by the applied prior art. To begin with, the Examiner read the claim limitation and the term 'pause' in view of the present application specification and rejected the claims accordingly. The 'pause' function according to the

Art Unit: 2484

specification is not performed using a remote control 'pause' button to pause the picture being displayed. Applicant's attention is directed to paragraphs 0040-0041 of the PG PUB of the present application where the term 'pause' appears.

[0040] In the course of editing, there may be times during which one or more of the video streams is paused. For example, in many cases, a video editor spends a great deal of time moving or re-sizing static images on the screen. During this time, the bandwidth of the bus 16 is not being fully utilized.

[0041] In one embodiment of the editing system 10, the editing process 30 is configured to request additional frame data during such pauses. When this is the case, a paused image will gradually improve its appearance on the display 36 as additional portions of the frame data representing that image are provided to the display 36. This allows recovery of otherwise wasted bandwidth.

Paragraph 0040 of the present application discloses a video editor spends a great deal of time moving or re-sizing static images on the screen, i.e., one or more of the video streams is paused.

Similarly Guedalia teaches, the user stays focused on a single view, in other words the user is paused on a single view or spending time on a single view. See at least col. 26 line 36.

Paragraph 0041 of the present application discloses the editing process configured to request additional frame data during such pauses.

Similarly Guedalia teaches additional frames stream in when the user stays focused on a single view. See at least col. 26 lines 26-28.

Paragraph 0041 further discloses a paused image will **gradually improve** its appearance on the display 36 as additional portions of the frame data representing that image are provided to the display 36.

Similarly Guedalia teaches the bitmap being displayed **enhanced** as additional partial frames stream in. See at least col. 26 lines 26-28.

Therefore the prior art teaches the claim limitation 'in response to detecting a pause in displaying the first frame, receiving an additional portion of the frame data for the first frame.'

Applicant is advised to read the applied prior context but not focus on finding the terms 'pause' and 'traffic' in the prior art. The prior art structure is capable of performing pause function and monitoring traffic, and therefore it meets the claimed limitation.

In regard to Claim 15

Applicant states, "Guedalia does not disclose 'fetching' first and second dynamically-determined extents of frame data for a first and second sets of progressively-encoded video data where the "second sets of progressively-encoded video data is distinct from the first set of video data."

In response the Examiner respectfully disagrees. As admitted by the Applicant combining two distinct (independent) video streams in to one is well known and disclosed in the background of the present application. Applicant's related art, paragraph 0002-0003 state:

[0002] The image one sees on a television screen is often a composite of several independent video streams that are combined into a single moving image. For example, when watching a commercial, one might see

Art Unit: 2484

in actor standing in what appears to be an exotic location.

[0003] Appearances notwithstanding, the actor is far more likely to be standing in front of a green background in a studio. The image of the exotic background and that of the actor are created separately and stored as separate video files representative of a separate video streams. Using a digital video editing system, a video editor combines and manipulates these separate video streams to create the image one finally sees on the television screen.

Therefore displaying a composite image of two independent video data is well known.

The prior art of Guedalia also teaches in col. 23 line 59-col. 24 line 13:

Advertising agencies are using object movies to produce interactive 3-D virtual reality presentations of merchandise on the Internet. The user can rotate and zoom the 3-D object, and examine it from different viewing angles. Using the methodology of the current invention, object movies can be progressively encoded so that the viewer can download and begin playing them almost immediately after the streaming begins. Initially the movie will scale to a quality commensurate with the bandwidth of the user's network connection, but as the data blocks are received and the user interacts with the movie, additional data blocks are delivered and integrated with the previous blocks, resulting in a higher and higher quality movie. An important feature of the invention is that, regardless of band width, the user can begin playback and interaction almost immediately, and does not need to wait for the complete download, as the first version of the movie delivered scales itself to the native bandwidth. As playback continues additional data streams in the background and the movie version is upgraded to higher and higher quality (emphasis added).

Guedalaia further recites in claim 5 that compressing video into a series of data blocks (referring to first and second video data) each block comprising a sequence of encoded frames, and the successive blocks are integrated together. See also claim 16

Art Unit: 2484

where the prior art claims data blocks together to reconstruct appropriate version of the content. See also figures 5 and 7 which show distinct blocks.

Therefore the prior art of Guedalaia teaches the claimed fetching' first and second dynamically-determined extents of frame data for a first and second sets of progressively-encoded video data where the second sets of progressively-encoded video data is distinct from the first set of video data.

In view of the above, the Examiner believes that the applied prior art of Guedalaia in fact teaches the claimed invention for at least the reasons discussed above and as stated in the detail Office Action as follows. This Office action is now made final.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 15 recites "computer-readable storage device." the specification fails to provide proper antecedent basis for 'computer-readable storage device.'

It is Noted that the 35 U.S.C. § 101 rejection and the objection to the specification can be overcome by limiting the claims to "A non-transitory computer readable storage medium" or "A computer readable medium where the medium is not a signal."

Claim Rejections - 35 USC § 102

Art Unit: 2484

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 8-13, and 15-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Guedalia (US PAT. NO 6, 536, 043).

Regarding claim 1, Guedalia discloses a video-editing system comprising:

a processing element configured to couple to a medium configured to store frames of a first progressively-encoded video stream (see figure 2 which shows units 35, 39 and 40 coupled; see also figure 3A which shows database structure; col. 27 lines 47-60 and col. 28 lines 5-25 and lines 31-55; see col. 26 lines 18-26 where the prior art teaches real-time encoding and encoding the bitmap into progressive partial frame) wherein ones of the frames in the first video stream include corresponding frame data (see figure 7, blocks#1-block#n, claim 5 which recites encoded data blocks, each block comprising a sequence of encoded frames, hence block #1 corresponding to the claimed first video stream, see also claim 5 of the prior art), wherein the processing element is configured to monitor traffic between the storage medium and the processing element (see col. 26 lines 19-45, and the response above, the client receives partial frames dynamically, not all the frames arrives at the client side at once), wherein the processing element is configured to dynamically determine, based at least in part on the

Art Unit: 2484

monitored traffic, an extent of a first frame in the first progressively-encoded video stream, wherein the processing element is configured to fetch the dynamically determined extent of the first frame, and wherein the dynamically-determined extent of the first frame is less than the entirety of the frame data of the first frame (see col. 28 lines 5-26, a single data block dynamically updated from client database; see col. 26 lines 13-45, viewing parameters receives from the user, the encoded data continually streamed, see figure 7 which shows original frame and higher quality version; see also figure 4; see also figure 9 low, medium and high quality version; see also figure 14; see also col. 31 line 37-col. 32 line 14; see col. 26 lines 24-45 the encoded data continually streamed in; see also the response above).

Regarding claim 2, Guedalia discloses the processing element comprises a decoder configured to transform frame data into a form suitable for display on a display device (see figure 2 decoder 36).

Regarding claim 3, Guedalia discloses the processing element is configured to determine the dynamically-determined extent of the first frame based in part on user input specifying the dynamically-determined extent (see col. 4 lines 46-53 where the prior art teaches the mechanism determining which frames to send within each block may be controlled by the user; see col. 28 lines 10-24 frames dynamically updated from client database; see col. 21 lines 47-62 where the prior art teaches user having a complete control).

Regarding claim 4, Guedalia discloses the processing element is configured to execute an editing process to dynamically determine the extent of the first frame on the

Art Unit: 2484

basis of traffic present on a data transmission channel between the processing element and the storage medium (see col. 25 lines 19-45 where the prior art teaches bandwidth connection of individual users and different qualities, col. 26 lines 13-40, col. 30 lines 24-33, and the response above).

Regarding claim 5, Guedalia discloses in response to detection of a pause in a display of the first progressively-encoded video stream, the processing element is configured to fetch previously unfetched portions of the frame data for currently displayed frame of the first progressively-encoded video stream (see col. 26 lines 13-45 where the prior art teaches viewing parameters are same as those selected at some previous stage (referring to detection of a pause), the server does not need to render the same bitmap again; the quality of the image enhanced as additional partial frames integrated; user stay focused in single view (paused), additional partial frames stream in, only partial frames arrived first and the rest of the frames arrives gradually and the bitmap being displayed enhanced as the additional frames stream in; see also the response above).

Regarding claim 6, Guedalia discloses the processing element is further configured to dynamically determine an extent of a second frame in a second progressively-encoded video stream, wherein the processing element is configured to fetch the dynamically-determined extent of the second frame, wherein the dynamically-determined extent of the second frame is different from the dynamically-determined extent of the first frame, and wherein the processor is configured to cause display of a combination of the first and second progressively-encoded video streams (see the

Art Unit: 2484

response above with respect to claim 15; see col. 29 lines 42-67 where the prior art teaches progressiveness in each database; see col. 30 lines 1-5 which discloses the interactive dimension of the database corresponds to whatever functionality the user allows, including videos, object movies; see also claims 3-8 of the applied prior art).

Regarding claim 8, Guedalia discloses a method, comprising:

dynamically determining extents of frame data for corresponding frames in a first video file comprising progressively-encoded frame data, wherein the dynamically-determined extents include a first extent specifying less than the entirety of the frame for a first frame in the first video file (see col. 28 lines 10-25 dynamically updated; see col. 26 lines 13-26 frames continually streamed from server to client; see col. 26 lines 13-45, viewing parameters receives from the user, the encoded data continually streamed, see figure 7 which shows original frame and higher quality version; see also figure 4; see also figure 9 low, medium and high quality version; see also figure 14; see also col. 31 line 37-col. 32 line 14; see col. 26 lines 24-45 the encoded data continually streamed in; see also the response above);

receiving the frame data specified by the first extent for the first frame (only first partial frame arrived, see col. 26 lines 19-38);

causing the received frame data for the first frame to be displayed (see col. 26 lines 24-38, claims 3-5 and the response above with respect to claim 8);

in response to detecting a pause in displaying the first frame, receiving an additional portion of the frame data for the first frame (see col. 26 lines 34-38 and claims 3-5 and the response above);

causing the additional portion of frame data for the first frame to be displayed
9see col. 26 lines 36-45, col. 31 lines 4-21 and the response above with respect to
claim 8).

The limitation of claims 9-10 can be found in claim 6. Therefore claims 9-10 are
analyzed and rejected for the same reasons as discussed in claim 6 above.

Regarding claim 11, Guedalia discloses receiving an instruction from a user
specifying a desired image quality and selecting an extent based at least in part on the
desired image quality (see figure 9, which shows quality level, see col. 21 lines 47-63
user can vary (select) quality level, see col. 33 line 59-col. 34 line 13, and claim 1
rejection above).

Claim 12 is rejected for the same reason as discussed in claim 4 above.

Regarding claim 13, Guedalia discloses causing the additional portion of frame
data for the first frame to be displayed comprises improving an appearance of the first
frame (see col. 26 lines 30-45, bitmap being displayed enhanced as additional partial
frames stream in).

Regarding claim 15, Guedalia discloses an article of manufacturer comprising a
computer-readable storage device having program instructions stored thereon that, in
response to execution by a computer system, cause the computer system to perform
operations including:

fetching, from a storage location, a first dynamically-determined extent of frame
data for a first frame of a first set of progressively-encoded video data, wherein the
dynamically-determined extent of frame data is less than the entirety of the available

Art Unit: 2484

frame data for the first frame (see claim 5 where the prior art recites encoded data blocks, each block comprising a sequence of coded frames; hence one block is referring to a first set of progressively-encoded video data; see also claim 2 of the prior art; see figures 5 and 7 which show the said blocks; see col. 32 lines 30-65; see col. 31 lines 61-63, progressively streaming; see also the response with respect to claim 15 above);

fetching from the storage location, a second dynamically-determined extent of frame data for a second frame of a second set of progressively-encoded video data distinct from the first set of video data, wherein the second dynamically-determined extent of frame data is less than the entirety of the available frame for the second frame see claim 5 where the prior art recites encoded data blocks, each block comprising a sequence of coded frames; hence one block is referring to a first set of progressively-encoded video data and another block referring to second-set of progressively-encoded video data; see also claim 2 of the prior art; see figures 5 and 7 which show the said blocks; see col. 32 lines 30-65; see also the response with respect to claim 15 above);

causing a display of a composite image including frames from the first and second sets of video data (see col. 33 lines 59-65 the blocks are integrated together; see col. 23 line 59-col. 24 line 13; see claim 5 where the prior art recites integrating data blocks together on client computer to reconstruct an appropriate version of video, upgrading the quality of the video while it is being replayed; see also the response above with respect to claim 15).

Claim 16 is rejected for the same reason as discussed in claim 1 above, the first partial frame displayed first then gradually the additional frames displayed and the bitmap enhanced.

Claims 17-18 and 20 are rejected for the same reasons as discussed in claims 3, 11 and 5 respectively above.

Regarding claim 19, Guedalia discloses dynamically-determined extents of frame data for the first set of video data follow a time-varying pattern (see col. 26 lines 41-45, not all the partial frames arrived once; see also col. 29 lines 51-57 progressive means time).

Regarding claim 21, Guedalia discloses the dynamically-determined extents of the corresponding frame data for the at least one of the frames in the first video stream include varying extents of frame data (see figures 4 and 9 extent of the frame data is different, see also col. 21 lines 48-63, col. 30 lines 7-33, col. 31 lines 37-46; see also claims 2-5 of the prior art).

Regarding claim 22, Guedalia discloses varying the extent of frame data fetched for different frames in the first video file (see figures 4 and 9 extent of the frame data is different, see also col. 21 lines 48-63, col. 30 lines 7-33, col. 31 line 37-col. 32 line 58; see claim 5 of the prior art).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2484

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/
Examiner, Art Unit 2484
February 09, 2011